

NO. 5:18-CV-229-FL

Defendant.

$$\begin{array}{c}) \\) \\) \\) \\) \\) \\) \\) \end{array}$$

After this action was filed, it was determined that defendant Corning Optical Communications LLC's parent company, above-named defendant Corning Incorporated, is the appropriately named defendant. Defendant Corning Incorporated does not have physical presence in the Western District but does in the Eastern District. (See DE 19). On July 18, 2018, the parties filed joint motion to substitute Corning Incorporated for Corning Optical Communications LLC and amend the case caption, which motion was granted the next day.

times for order granting motion for extension of time for defendant to file answer and then filed joint motion to transfer to this district, which transfer occurred on May 23, 2018.

That same day this case transferred to the Eastern District, defendant filed its first motion to dismiss plaintiff's complaint for failure to state a claim. The court granted defendant's motion, dismissing plaintiff's claims without prejudice because plaintiff failed to plausibly allege that some activity by defendant performs a "selection" of fibers "for use a communications network" using the three steps of plaintiff's patented method. With leave of court, plaintiff filed an amended complaint. Thereafter, defendant filed its second motion to dismiss, arguing that plaintiff's amended complaint suffers from the same defects that warranted dismissal of plaintiff's original complaint.

STATEMENT OF THE FACTS

The facts alleged in plaintiff's amended complaint are summarized as follows. The United States Patent and Trademark Office issued the '027 patent on January 8, 2013, and the '115 patent on July 16, 2014, both of which relate to innovate methods using new and useful techniques for selecting multimode optical fiber. Both patents share the same description of the invention and have largely identical claims, with both patents including one method claim, reciting a "method for selecting multimode optical fiber." More specifically, the '115 patent claims as follows:

1. A method for selecting multimode optical fiber for use in a communications network, said method comprising:
 - measuring a pulse delay for pulses traveling through different radii of a number of multimode optical fibers:
 - subtracting the pulse delay at a first radius of each multi mode optical fiber from the pulse delay at a second, larger radius of each multimode fiber; and
 - choosing for use in the communications network those optical fibers in which the result of subtracting the pulse delay at the first radius from the pulse delay at the second radius is a negative number.

2. The method of claim 1 wherein said first radius is 5 μ m and said second radius is 19 μ m.
3. The method of claim 1 wherein said first radius is 5 μ m and said second radius is 20 μ m.
4. The method of claim 1 wherein said first radius and said second radius are 14 μ m to 15 μ m apart.

(See '115 patent (DE 43-2) at col. 6, ll. 32-47; see also '027 patent (DE 43-1) at col. 6, ll. 30-46 (largely identical to '115 patent)).

In other words, the patents at issue propose a three-step method for selecting optical fiber: 1) fiber is measured at two different locations in a certain way, 2) those two measurements are subtracted, and 3) the fiber is chosen if the result of that subtraction is a negative number. (See Am. Compl. ¶¶ 11-12). The patent explains that fibers having a negative Differential Mode Delay (“DMD”) shift, or a negative number resulting from the “measure of the difference in pulse delay . . . between the fastest and slowest modes traversing the fiber,” have lower error rates and outperform positive DMD shifted fibers. (See id. ¶¶ 13–16; '115 patent (DE 43-2) at col. 1, ll. 34-37; id. at col. 5, ll. 24-26 (“The negative DMD shift fibers exhibit lower [bit error rates] overall and significantly outperform the positive DMD shifted fibers.”)).

Optical fiber is made by drawing glass into thin strands. (Am. Compl. ¶ 17 (citing Corning’s Manufacturing Advantage, July 26, 2013, <https://www.youtube.com/watch?v=7tsF3mSpqX8> [<https://perma.cc/4PWQ-YCNZ>] at 1:10–3:00)). During the fiber draw process, fiber parameters are monitored using computer controls and layers of protective coating are applied. (Id. ¶ 18 (citing Corning’s Manufacturing Advantage at 3:00–3:30)). After the draw process, the optical fiber is tested for strength, optical performance and geometric parameters. (Id. ¶ 19 (citing Corning’s Manufacturing Advantage at 3:30–3:51) (“[T]hen optical and physical parameters are measured to verify performance against

specifications.”)). Bandwidth, or information-carrying capacity of the optical fiber, is verified by measuring DMD in accordance with known industry practices, including those defined by Telecommunications Industry Association (“TIA”) standard TIA-220. (Id. (internal citations omitted)). The DMD measurements are used to calculate industry-standard Effective Modal Bandwidth (“EMB”), a commonly used metric used to grade fibers. (Id. ¶¶ 14, 20). The measurement data is recorded into documentation associated with each spool of fiber, so the spools may be selected based on recorded data. (Id. ¶ 21 (citing Corning’s Manufacturing Advantage at 3:50–4:00)). After inspection and testing, the fibers are graded according to TIA performance criteria and bundled together into cables. (See id. ¶¶ 22–24).

When plaintiff tests and measures its own fibers, the testing equipment performing the testing of fibers for plaintiff’s cables performs plaintiff’s patented three step process in addition to industry-standard measurement of DMD. (Id. ¶¶ 25–26). The fibers selected for inclusion in plaintiff’s cables collectively produce “OM4+” cables, which is not a defined industry standard. (Id. ¶ 27).

Plaintiff alleges that on information and belief, defendant, alone or with others, sells, manufactures, imports, uses, offers for sale, has made or selected, or used measurements to select and/or classify fiber optic materials, including multimode optical fiber, using methods that infringe plaintiff’s patents. (See id. ¶¶ 29–37). In a video entitled “Corning’s Manufacturing Advantage,” defendant explains that “[t]hen optical and physical parameters are measured to verify performance against specification.” (Corning’s Manufacturing Advantage at 3:45). Defendant “ensure[s] EMB via calculated effective modal bandwidth (minEMBc) for all our ClearCurve multimode optical fibers. minEMBc is a differential mode delay (DMD) - based bandwidth value

that best predicts multimode system performance in high-bandwidth laser-based 1 and 10 Gb/s as well as the future 40 and 100 Gb/s systems.” (Corning ClearCurve Product Information (DE 43-5) at 2). Corning fiber reels are assigned a unique serial number so that testing data remains associated with each reel of optical fiber. (Am. Compl. ¶ 34 (citing Corning’s Manufacturing Advantage at 3:50-4:00)).¹

Plaintiff allegedly tested specimens of cables produced by defendant and found that the fibers within those cables systematically (i.e., all 12 fibers in the cable) exhibited a negative DMD shift for the low radial region 1-3 microns and high radial region 15-17 microns. (See Am. Compl. ¶ 56).² Plaintiff alleges on information and belief that its patented method of selection is the only way to achieve systematic exhibition of a negative DMD shift in those regions. (Id. ¶ 57). Elaborating on this point, plaintiff explains that even if fibers are drawn from the same preform or optical fiber blank, lengths of that fiber will have a positive DMD shift, negative DMD shift, and even zero DMD shift. (Id. ¶ 58). Preforms are divided into approximately seven to eight spools of 17.6-kilometer length, potentially necessitating multiple different preforms to make a 12-fiber cable. (Id.; see Corning ClearCurve Multimode Optical Fiber (DE 43-3) at 2). From these facts, plaintiff alleges that defendant purposefully tested and selected accused fibers using its selection method. (Id. ¶ 59).

Additional facts pertinent to the instant motion will be discussed below.

¹ Employing language from the ’115 and ’027 patents, plaintiff additionally assert defendant “measures the peak delay for pulses traveling through different radii of a number of multimode optical fibers, subtracts the measured peak delay at one radius from the peak delay at a second larger radius, and provides an output indicating whether this subtraction results in a negative number.” (Am. Compl. ¶ 33).

² Plaintiff alleges defendant has knowledge of the relevant patents and defendant’s infringement by “at least on or about a December 20, 2017 meeting between Plaintiff and Defendant wherein such was explained to Defendant.” (Am. Compl. ¶¶ 73, 75, 97, 99).

DISCUSSION

A. Standard of Review

A complaint states a claim if it contains “sufficient factual matter, accepted as true, to ‘state a claim to relief that is plausible on its face.’” Ashcroft v. Iqbal, 556 U.S. 662, 678 (2009) (quoting Bell Atl. Corp. v. Twombly, 550 U.S. 544, 570 (2007)). “Asking for plausible grounds . . . does not impose a probability requirement at the pleading stage; it simply calls for enough fact to raise a reasonable expectation that discovery will reveal [the] evidence” required to prove the claim. Twombly, 550 U.S. at 556. In evaluating the complaint, “[the] court accepts all well-pled facts as true and construes these facts in the light most favorable to the plaintiff,” but does not consider “legal conclusions, elements of a cause of action, . . . bare assertions devoid of further factual enhancement[,] . . . unwarranted inferences, unreasonable conclusions, or arguments.” Nemet Chevrolet, Ltd. v. Consumeraffairs.com, Inc., 591 F.3d 250, 255 (4th Cir. 2009). When ruling on a motion to dismiss, the court may consider the facts as alleged in the complaint, “documents attached to the complaint, . . . [and documents] attached to the motion to dismiss, so long as they are integral to the complaint and authentic.” Sec’y of State for Defence v. Trimble Navigation Ltd., 484 F.3d 700, 705 (4th Cir. 2007) (citations omitted).

B. Analysis

Defendant argues that plaintiff has failed to sufficiently allege that defendant directly or indirectly infringed plaintiff’s asserted patents. The court will address each argument in turn below.

1. Direct Infringement

“Direct infringement under § 271(a) occurs where all steps of a claimed method are performed by or attributable to a single entity.” Akamai Techs., Inc. v. Limelight Networks, Inc., 797 F.3d 1020, 1022 (Fed. Cir. 2015) (en banc) (citing BMC Res., Inc. v. Paymentech, L.P., 498 F.3d 1373, 1379–81 (Fed. Cir. 2007)); 35 U.S.C. § 271(a). “A method patent claims a number of steps . . . [and] the patent is not infringed unless all the steps are carried out.” Limelight Networks, Inc. v. Akamai Techs., Inc., 572 U.S. 915, 921 (2014). A plaintiff’s complaint must “place the alleged infringer on notice of what activity is being accused of infringement.” Lifetime Indus., Inc. v. Trim-Lok, Inc., 869 F.3d 1372, 1379 (Fed. Cir. 2017) (citation omitted). There is no requirement for plaintiff to “prove its case at the pleading stage.” In re Bill of Lading Transmission & Processing Sys. Patent Litig., 681 F.3d 1323, 1339 (Fed. Cir. 2012) (citation omitted).

Plaintiff’s amended complaint cures the deficiencies noted in the court’s prior order regarding testing of defendant’s fibers to confirm infringement. Taking the facts alleged in the complaint as true, tested specimens of OM4+ cables produced by defendant and found that the fibers within those cables systematically (i.e., all 12 fibers in the cable) exhibited a negative DMD shift for the low radial region 1-3 microns and high radial region 15-17 microns, which plaintiff again contends would be a statistical impossibility absent use of its patented method. (See Am. Compl. ¶ 56). To cross the line from consistency to causality, plaintiff alleges on information and belief that its patented method of selection is the only way to achieve systematic exhibition of a negative DMD shift in those regions. (Id. ¶ 57). Elaborating further, plaintiff alleges that fibers contain lengths with positive DMD shift, negative DMD shift, and zero DMD shift, giving rise to

a plausible inference that defendant purposefully selected fibers for inclusion in the OM4+ cables based on their negative DMD shift. (Id. ¶ 58).

Viewing plaintiff's allegations regarding testing in conjunction with the complaint as a whole, defendant is on notice as to what process is being accused of infringement. Plaintiff alleges that, after the draw process but before defendant assigns fibers serial numbers, defendant's optical fiber is tested using the equipment performing DMD measurements (such as sampling oscilloscope, test benches and/or computers) for DMD shift using plaintiff's patented method. (Am. Compl. ¶¶ 19-21, 33 (citing Corning's Manufacturing Advantage at 3:30–3:51; Corning ClearCurve Product Information (DE 43-5) at 2)). The measurement data is then recorded and associated with each spool of fiber so that defendant's fibers may be selected for cabling, allegedly based on the DMD shift of those fibers. (See id. ¶¶ 21, 24, 34). In addition, plaintiff identifies defendant's "OM4+" cables as accused cables incorporating the accused fibers, alleging on information and belief that selection of fibers according to plaintiff's patented method is the only way to achieve the EMB associated with defendant's "OM4+" designation. (See id. ¶¶ 39-49).

Defendant argues that plaintiff's testing is invalid, because the 12 fibers in a package generally have the same properties as a byproduct of how they are manufactured. Defendant also disputes plaintiff's assertion that OM4+ cables must have negative DMD profiles. Finally, defendant argues that plaintiff's claimed method does not encompass every method which results in some negative DMD profiles, pointing to industry standard DMD metrics. These arguments are certainly arguments to be raised after discovery, but at this juncture the court takes plaintiff's allegations regarding its testing of defendant's fibers and the impossibility of other methods of selection as true.

Defendant also argues that a significant number of the allegations in plaintiff's complaint do not put it on notice because they do not actually involve its processes. "A defendant cannot shield itself from a complaint for direct infringement by operating in such secrecy that the filing of a complaint itself is impossible." K-Tech Telecommunications, Inc. v. Time Warner Cable, Inc., 714 F.3d 1277, 1286 (Fed. Cir. 2013) (finding that fair inferences can be drawn from allegations in the complaints regarding the nature of defendants' businesses, the industry standards to which they are required to adhere, and the output signals produced). Moreover, "a plaintiff in a patent infringement suit is not required to specifically include each element of the claims of the asserted patent." Id. at 1284 (citing Phonometrics, Inc. v. Hospitality Franchise Sys., Inc., 203 F.3d 790, 794 (Fed.Cir. 2000)). Even so, the complaint must still plead sufficient facts to place defendant on notice of what activity is accused of infringement. See id.

Unlike the original complaint, plaintiff's amended complaint explains in detail defendant's alleged process of drawing fiber, the point at which DMD shift measurements allegedly are taken, and the point at which defendant allegedly cables its fiber based on those measurements. (See Compl. ¶¶ 17-24, 28-37). In support of this description, plaintiff relies upon information a variety of source material, including defendant and similar companies' descriptions of creating optical fiber and subsequently incorporating those fibers into cables. (See Corning's Manufacturing Advantage; Corning ClearCurve Multimode Optical Fiber (DE 43-3) at 2; Corning ClearCurve Product Information (DE 43-5) at 2; OFS Optics: Manufacturing High-Performance Optical Fiber, Oct. 16, 2013, https://www.youtube.com/watch?v=liKOYbgIC_c [<https://perma.cc/U3RP-YA9M>]; How It's Made: Optical Fiber Communications Cable, Jan. 18, 2012, <https://www.youtube.com/watch?v=fjRqGKU9cUU> [<https://perma.cc/H39G-X2T5>]). Plaintiff

confirms based on its own processes that its selection of fibers “is done during the optical testing and measurement step of fiber manufacturing.” (Am. Compl. ¶ 26). In addition, plaintiff provides descriptions of products that, on information and belief, were impacted by the accused processes. That plaintiff cannot provide more specifics at this juncture does not defeat the plausibility of its direct infringement claim. See Disc Disease Sols. Inc. v. VGH Sols., Inc., 888 F.3d 1256, 1260 (Fed. Cir. 2018). Defendant’s motion to dismiss plaintiff’s direct infringement claim is denied.

2. Indirect Infringement

“Whoever actively induces infringement of a patent shall be liable as an infringer.” 35 U.S.C. § 271(b). To state a claim for induced infringement, a plaintiff must allege 1) knowledge of the patent, 2) specific intent that another party infringe the patent, and 3) knowledge that the induced acts constitute infringement. See Commil USA, LLC v. Cisco Sys., Inc., 135 S. Ct. 1920, 1926 (2015); Nalco Co. v. Chem-Mod, LLC, 883 F.3d 1337, 1355 (Fed. Cir. 2018). As relevant here, contributory infringement occurs when a party 1) “sells within the United States . . . a material or apparatus for use in practicing a patented process,” 2) which “constitut[es] a material part of the invention,” 3) “knowing the same to be especially made or especially adapted for use in an infringement of such patent,” and 4) the material or apparatus is “not a staple article or commodity of commerce suitable for substantial noninfringing use” 35 U.S.C. § 271(c). “Like induced infringement, contributory infringement requires knowledge of the patent in suit and knowledge of patent infringement.” Commil, 135 S. Ct. at 1926.

Additionally, although direct infringement and indirect infringement, in other words induced infringement or contributory infringement, “are distinct concepts, with distinct standards,” “liability for indirect infringement of a patent requires direct infringement,” and therefore a

“complaint[] must plausibly allege that the . . . patent was directly infringed to survive . . . motion to dismiss.” Bill of Lading, 681 F.3d at 1333; see also Linear Tech. Corp. v. Impala Linear Corp., 379 F.3d 1311, 1326 (Fed. Cir. 2004) (“There can be no inducement or contributory infringement without an underlying act of direct infringement.”).

Plaintiff alleges that reels of accused fibers may be cabled by third-parties. (Am. Compl. ¶ 51; see id. ¶¶ 22-24). Defendant allegedly supplied these third-party cablers with recorded measurement data, including the output of comparison of peak and/or pulse delays, associated with each spool of accused fiber so the spools may be selected based on the recorded data. (Id. ¶ 52). Plaintiff also alleges that third-party cables it has tested also systematically exhibit a negative DMD shift, which it explains could only occur if the third-party cablers selected fibers for inclusion in its cables based of plaintiff’s patented method. (Id. ¶¶ 56-58). Plaintiff alleges defendant has knowledge of the relevant patents and defendant’s infringement by “at least on or about a December 20, 2017 meeting between Plaintiff and Defendant wherein such was explained to Defendant.” (Id. ¶¶ 73, 75, 97, 99). In view of the facts alleged, the court leaves for ruling on a more complete record plaintiff’s claims of indirect infringement.

CONCLUSION

Based on the foregoing, defendant’s motion to dismiss (DE 44) is DENIED. Having disposed of the instant motion, the court hereby LIFTS the stay on this case, and an initial order on planning and scheduling will follow.

SO ORDERED, this the 7th day of November, 2019.


LOUISE W. FLANAGAN
United States District Judge